

CLAIMS

1. A recording apparatus for compression-
encoding a digital video signal, generating a bit
stream having a hierarchical structure composed of a
plurality of hierarchical levels, and recording the bit
stream to a record medium, comprising:

encoding means for intra-frame encoding all
the digital video signal so as to compress the digital
video signal;

adding means for adding a header of the
highest hierarchical level to the bit stream of each
frame; and

recording means for recording the bit stream
to which the header of the highest hierarchical level
has been added to the record medium.

2. The recording apparatus as set forth in claim
1, further comprising:

interpolating means for interpolating the
header of the highest hierarchical level.

3. The recording apparatus as set forth in claim
2,

wherein said interpolating means comprises:

determining means for determining whether the
header of the highest hierarchical level is absent or
an inconsistency of encoding syntax takes place; and

storing means for storing the latest header
of the highest hierarchical level, and

wherein when the determined result of said determining means represents that the header of the highest hierarchical level is absent or abnormal, said adding means adds the latest header of the highest hierarchical level stored in said storing means to the bit stream of each frame.

4. The recording apparatus as set forth in claim 2,

wherein said interpolating means comprises:
determining means for determining whether the header of the highest hierarchical level is absent or abnormal; and

storing means for storing a prepared header of the highest hierarchical level, and

wherein when the determined result of said determining means represents that the header of the highest hierarchical level is absent or an inconsistent of encoding syntax takes place, said adding means adds the prepared header of the highest hierarchical level stored in said storing means to the bit stream of each frame.

5. A recording apparatus for compression-encoding a digital video signal, generating a bit stream having a hierarchical structure composed of a plurality of hierarchical levels, and recording the bit stream to a record medium, comprising:

encoding means for intra-frame encoding all

the digital video signal so as to compress the digital video signal;

adding means for adding a quantizing matrix to the bit stream of each frame; and

5 recording means for recording the bit stream to which the quantizing matrix has been added to the record medium.

6. The recording apparatus as set forth in claim 5, further comprising:

10 interpolating means for interpolating the header of the highest hierarchical level.

7. The recording apparatus as set forth in claim 6,

wherein said interpolating means comprises:

15 determining means for determining whether the quantizing matrix is absent or abnormal; and

storing means for storing the latest quantizing matrix, and

20 wherein when the determined result of said determining means represents that the quantizing matrix is absent or abnormal, said adding means adds the latest quantizing matrix stored in said storing means to the bit stream of each frame.

8. The recording apparatus as set forth in claim 6,

wherein said interpolating means comprises:

determining means for determining whether the

quantizing matrix is absent or abnormal; and

storing means for storing a prepared
quantizing matrix, and

wherein when the determined result of said
5 determining means represents that the quantizing matrix
is absent or abnormal, said adding means adds the
prepared quantizing matrix stored in said storing means
to the bit stream of each frame.

9. A recording method for compression-encoding a
10 digital video signal, generating a bit stream having a
hierarchical structure composed of a plurality of
hierarchical levels, and recording the bit stream to a
record medium, comprising the steps of:

intra-frame encoding all the digital video
15 signal so as to compress the digital video signal;

adding a header of the highest hierarchical
level to the bit stream of each frame; and

20 recording the bit stream to which the header
of the highest hierarchical level has been added to the
record medium.

10. A recording method for compression-encoding a
digital video signal, generating a bit stream having a
hierarchical structure composed of a plurality of
hierarchical levels, and recording the bit stream to a
25 record medium, comprising the steps of:

intra-frame encoding all the digital video
signal so as to compress the digital video signal;

adding a quantizing matrix to the bit stream
of each frame; and

recording the bit stream to which the
quantizing matrix has been added to the record medium.

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